



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,704	05/17/2001	Sven Mattisson	45051-00016USPX	4107
23932	7590	11/08/2004	EXAMINER	
JENKENS & GILCHRIST, PC 1445 ROSS AVENUE SUITE 3200 DALLAS, TX 75202			GHULAMALI, QUTBUDDIN	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/859,704	Applicant(s) MATTISSON ET AL.	
	Examiner Qutub Ghulamali	Art Unit 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1- 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/17/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halloran et al ("Halloran") (GB-2329303).

Consider claims 1, 7, Halloran discloses (figs 1A, 1B), a dual mode communication device 102 configured for communication at a first mode and a second mode, a first radio 124 for use in a first frequency band, and a second radio 126 for use in a second frequency band (page 4, lines 20-30, 32-34), a controller 114, 120 (166) coupled to the first and second radio, wherein the controller 166 with the communication device 102 assess the status of communication using service indicator to set the first radio in its second operating mode based on availability (fig. 2) 216, select the second (secondary mode) communication mode 206, otherwise set the first radio in its operating mode 220. The difference between Halloran and the claimed subject matter is of the first radio operating at a second mode employing a second frequency, the second frequency range being smaller than the first frequency range. It is noted that that in the context of dual mode operation Halloran, discloses (pages 1-2) that an existing dual mode radiophone, being dual mode communication device, can operate at a different frequency (range) such as a first

Art Unit: 2637

band of frequencies near 800 MHz and a second band of frequencies around 1900 MHz in different modes (pages 1, 2). Given that, it would have been obvious to one skilled in the art at the time the invention was made to utilize the features of dual mode communication to provide a similar arrangement offered with existing dual mode radios so as to enhance the radio's communication capabilities operating under different frequencies (range) as disclosed by Halloran (page 1, lines 36-40; page 2, lines 5-6).

Regarding claims 3 and 4, Halloran discloses that the first radio or the second radio or both may be either a satellite systems (such as Globalstar) or terrestrial (such as Bluetooth radio) (page 4, lines 1-19, 28-29).

3. Claims 2, 5, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halloran et al ("Halloran") (GB-2329303) in view of Yokev et al ("Yokev") (US Patent No. 5,596,330).

With reference to claims 2, 5 and 8, Halloran discloses, in combination with other claim limitations, every feature of the invention as claimed with reference to claims 1, 3, 4 and 7 highlighted above. The difference between the above and the claimed invention is the use of hop frequencies within a first frequency range and a second frequency range. Yokev discloses a frequency hopped spread-spectrum radio transmitter simultaneously transmit two (plurality) radio carrier frequency signals, having different hop frequencies, the two carrier signals are received by at least three base stations, the transmitter uses a first frequency range (902.00375 MHz- 3.75KHz) and a second frequency range (902.01025-3.75KHz) (col. 13, lines 23-33). It would have been obvious to the person having ordinary skill in the art at the time the invention

Art Unit: 2637

was made to provide a conventional spread spectrum communication system capable of transmitting hop frequencies so as to minimize interference and dual mode operation as taught by Yokey.

Regarding claim 6, Halloran discloses, in combination with other claim limitations, every feature of the invention claimed regarding claims 1, 3, 4 and 7 highlighted above. Holloran is silent to operating mode employing a number of hop carrier frequencies that are spaced apart (message length and number of transmission hops). Yokey discloses a typical transmission consisting of 53 hops or 53 changed frequencies selected from a narrow band of frequencies based on a 1000 member pseudo-random noise code. The message length and the number of frequency hops are a matter of design choice, leading to 79 hops spaced apart by about 1 MHz are readily recognizable. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ as first operating mode of 79 hops starting at 2.4 GHz spaced apart by about 1 MHz with second operating mode of 23 hops so as to limit a part of the frequency band and maximize spectral separation from the receive band as taught by Yokey (col. 9, lines 10-12; col. 10, lines 48-65).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chauncey et al (US 2002/0001337), Ito et al (US Patent 4,435,821), Smith et al (US Patent 5,796,772) are cited as arts of interest showing multi mode spread spectrum radio communication system.

Art Unit: 2637

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutub Ghulamali whose telephone number is (571) 272-3014.

The examiner can normally be reached on Monday-Friday from 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Qutub Ghulamali.
October 1, 2004.

TEMESGHEN GHEBRETINSAE
PRIMARY EXAMINER
10/30/04